

REMARKS

No new claims have been added in this paper. No claims have been canceled in this paper. Claim 33 has been amended in this paper. Therefore, claims 3, 5, 14-18, 20-24, 28 and 31-36 are pending and are under active consideration.

Claim 33 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,82,602 to R.L. Tellas et al. (hereinafter Tellas) in view of U.S. Patent No. 6,636,407 to H.G. Ryman (hereinafter Ryman). In support of the rejection, the Examiner commented,

Regarding claim 33, Tellas discloses the claimed invention including:

- An outer conductor (Figure 3-28)
- An inner conductor (Figure 3-32) extending coaxially within said outer conductor, said inner and outer conductors being spaced apart (Figure 3)
- An RFIC tube (Figure 3-38) disposed between said inner conductor and said outer conductor, said RFIC tube being shaped to define an opening (Figure 3-36)
- A shunt conductor (Figure 3-40) for shunting electromagnetic signals traveling within said inner conductor which fall outside of the desired frequency band, said shunt conductor comprising a first end (Figure 3-32) and a second end (Figure 3-42), the first end of said shunt conductor being coupled to said inner conductor (Figure 3-32) and the second end of said shunt conductor being coupled to said outer conductor (Figure 3-42).
- Wherein said shunt conductor (Figure 3-40) comprises first and second contiguous curved portions, said first and second curved portions extending along different arcuate paths (Figure 3-40)

Tellas does not disclose the second portion of the shunt conductor to be in the form of a helix. However, Ryman, in at least col. 8, lines 17-43, discloses a surge protector including a helical aperture. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Tellas' protective device with Ryman's use of a helical shape in the shunt conductor because adjusting the helical revolutions helps to optimize the shunt frequencies and return loss to values for a particular device.

This rejection is respectfully traversed.

Applicant claims a protective device comprising, inter alia, an outer conductor, an inner conductor extending coaxially within the outer conductor, an RFIC tube disposed between the inner

and outer conductors, and a shunt conductor coupled to the inner and outer conductors, the shunt conductor helically coiling around the inner conductor along a portion of its length. As noted by the Examiner, Tellas does not disclose a shunt conductor which helically coils around the inner conductor along a portion of its length. Rather, the Examiner suggests combining the protective device in Tellas with conductor (26) in Ryman. Applicant respectfully disagrees with the Examiner's contention that combining Tellas and Ryman in this manner renders applicant's claimed invention obvious.

Specifically, applicant claims a shunt conductor that helically coils around the inner conductor along a portion of its length. To the contrary, Ryman does not teach, disclose or suggest providing a shunt conductor that helically coils around the inner conductor along a portion of its length. Rather, Ryman discloses a stub conductor (26) which extends at a right angle relative to its inner conductor (20). *See* Fig. 1 of Ryman. Clearly, the stub conductor (26) in Ryman does not helically coil around inner conductor (20), as claimed by applicant. As can be appreciated, because applicant's shunt conductor (165) helically coils around inner conductor (139) along a portion of its length, applicant's shunt conductor is able to accommodate a relatively long length without significantly increasing the overall size of the device. *See e.g.*, Fig. 9 and page 18, lines 14-16 of the subject application. To the contrary, the orthogonal projection of the stub conductor (26) in Ryman relative to its inner conductor (20) significantly increases the overall size of the device, which is highly undesirable in particular applications.

Applicant wishes to note for the record that, on pages 3-4 of the Office Action, the Examiner commented,

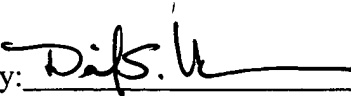
4. Claim 3, 5, 14, 15, 16-18, 20-24, 28, 31, 32, 34, 35 and 36 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: Regarding claim 3, applicant has overcome the prior art by more clearly describing an intermediary portion of a shunt conductor to be non-linear along the entirety of its length, because the more annular shape eliminates sharp bends that can deform or break the shorting stub as a result of high current transients. Regarding claim 14, applicant has overcome the prior art by further limiting the insulator pairs, specifically a *second dielectric material disposed between the first pair of insulators and at least one of the inner conductor and the outer conductor*. In light of newly submitted references found in the IDS on 9/27/2007, the examiner would like to note that Jones et al. (US Patent No. 6,061,223) generally discloses applicant's limitations, except for the use of an *RFIC tube* with the shunt conductor that is non-linear along the entirety of its length. Additionally, there is no motivation to combine Jones with other cited references.

It is respectfully submitted that the present application is in condition for allowance. Prompt and favorable action is earnestly solicited. If the Examiner determines that the present Amendment does not place the above-identified application in condition for allowance, it is kindly requested that the Examiner contact the undersigned attorney at the telephone number listed below.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

Kriegsman & Kriegsman

By: 

Daniel S. Kriegsman
Reg. No. 40,057
30 Turnpike Road
Suite 9
Southborough, MA 01772
(508) 481-3500

Date: 2-19-08



I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 2-19-08.

A handwritten signature in black ink, appearing to read "D.S. Kriegsman", written over a horizontal line.

Daniel S. Kriegsman